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ZORA URL: <https://doi.org/10.5167/uzh-177680>

Published Research Report

Published Version

Originally published at:

Ackva, Johannes; Haug, Constanze; Tänzler, Dennis; Conway, Darragh; Hermann, Barbara; Michaelowa, Axel; Hoch, Stephan; Espelage, Aglaja (2019). Tipping the balance: lessons on building support for carbon pricing. Berlin: adelphi consult / Berlin.



POLICY BRIEF

Tipping the balance

Lessons on building support for carbon pricing

Imprint

Publisher:

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Photo credits: Paapaya, Charlotte Raboff, Volodymyr Kyrylyuk, charnsitr –
all shutterstock.com (clockwise, from upper left)

Date: 11.07.2019

This paper has been commissioned by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

Suggested Citation

Conway, Darragh; Johannes Ackva, Axel Michaelowa, Barbara Hermann, Constanze Haug, Aglaja Espelage, Dennis Tänzler and Stephan Hoch (2019): *Tipping the balance. Lessons on building support for carbon prices*. Policy Brief commissioned by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). Berlin/Amsterdam/Freiburg: adelphi/Climate Focus/Perspectives Climate Group.

Disclaimer

The analysis, results and recommendations in this paper, funded by the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU), represent the opinion of the authors and are neither necessarily representative of the position of the funder nor of the Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. The authors would like to thank Moritz von Unger for his valuable input during the review process.

Acknowledgements

The authors wish to thank the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the Gesellschaft für Internationale Zusammenarbeit (GIZ) for their contribution in defining specific trends and topics of analysis and for sharing their insights and experiences. Needless to say, this does not imply that they endorse the analysis or recommendations included in the publication.

On behalf of:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

Implemented by:



of the Federal Republic of Germany

Tipping the balance

Lessons on building support for carbon pricing

adelphi

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Climate Focus has offices in Amsterdam, Rotterdam, Berlin, Bogota, and Washington, D.C. Further details about Climate Focus can be found at: www.climatefocus.com

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Contents

List of Abbreviations	V
Executive Summary	1
Introduction	2
1 Case study: Carbon pricing in Sweden	3
1.1 Introduction and development of the carbon tax	3
1.2 Distributional as well as fairness issues and corresponding solutions	3
1.3 Communication tools in the process, main issues and public responses	4
1.4 Criticism / concerns of different stakeholders and consideration by political leaders	4
1.5 Lessons learnt from the Swedish case and possible implications for other contexts	5
2 Case study: Carbon pricing in Switzerland	6
2.1 Introduction and development of the carbon tax	6
2.2 Distributional as well as fairness issues and corresponding solutions	6
2.3 Communication tools in the process, main issues and public responses	6
2.4 Criticism / concerns of different stakeholders and consideration by political leaders	8
3 Case study: Carbon pricing in British Columbia	9
3.1 Introduction and development of the carbon tax	9
3.2 Distributional as well as fairness issues and corresponding solutions	9
3.3 Communication tools, main issues and public responses	10
3.4 Criticism / concerns of different stakeholders and consideration by political leaders	10
4 Case study: Carbon pricing in Australia	12
4.1 Introduction and development of the carbon tax	12
4.2 Distributional as well as fairness issues and corresponding solutions	12
4.3 Communication tools in the process, main issues and public responses	13
4.4 Criticism / concerns of different stakeholders and consideration by political leaders	14
5 Case study: Carbon pricing in France	15

5.1	Introduction and development of the carbon tax	15
5.2	Distributional as well as fairness issues and corresponding solutions	15
5.3	Communication tools in the process, main issues and public responses	16
5.4	Criticism / concerns of different stakeholders and consideration by political leaders	17
5.5	Lessons learnt from the French case and possible implications for other contexts	17
6	Case study: Carbon pricing in Colombia	18
6.1	Introduction and development of the carbon tax	18
6.2	Distributional as well as fairness issues and corresponding solutions	18
6.3	Communication tools in the process, main issues and public responses	19
6.4	Criticism / concerns of different stakeholders and consideration during tax implementation	19
6.5	Lessons learnt from the Colombian case and possible implications for other contexts	19
7	Comparative Analysis of Case Studies	21
8	Lessons learned	26
8.1	The importance of integrating policy and communications	26
8.2	Communications and stakeholder engagement as an integral part of the policy-making process	27
8.3	The central role of tailored and tested narratives	27
8.4	What's in a name? Getting the label right	28
8.5	Addressing leakage, competitiveness and international action	28
8.6	Ensuring the carbon price is fair (and perceived as fair)	29
	Bibliography	31

List of Abbreviations

CMIA	Climate Markets and Investment Association
CDM	Clean Development Mechanism
CEE	French carbon tax (Contribution Climat-Énergie)
CER	Certified Emission Reduction
CFDT	French Labour Union (Confédération française démocratique du travail)
CICE	Tax credit for employment and competitiveness (Crédit d'Impôt pour la Compétitivité et l'Emploi)
CPLC	Carbon Pricing Leadership Coalition
CPM	Carbon Pricing Mechanism (Australia)
DIAN	National directorate of taxes and customs of Colombia (Dirección de Impuestos y Aduanas Nacionales)
EDF	Environmental Defense Fund
EITE	Emissions-Intensive and Trade-Exposed Industries
ETS	Emissions Trading System
HAP	Household Assistance Package (Australia)
IETA	International Emissions Trading Association
IPP	Institut Des Politiques Publiques
MADS	Ministry of Environment and Sustainable Development (Ministerio de Ambiente y Desarrollo Sostenible) (Colombia)
Naturgas	National Assoc. of Natural Gas (Asociación Colombiana de Gas Natural)
NDC	Nationally Determined Contribution
OASI	Old-Age and Survivor's Insurance (Switzerland)
OECD	Organization for Economic Cooperation and Development
ONAC	National accreditation body of Colombia (Organismo Nacional de Acreditación de Colombia)
PMR	Partnership for Market Readiness
SISCLIMA	National system of climate change (Sistema Nacional de Cambio Climático)
TICC	Coal consumption tax (Taxe Intérieure de Consommation sur le Charbon)
TICPE	Energy consumption tax (Taxe Intérieure de Consommation sur les Produits Energétiques)
TIGN	Heating gas consumption tax (Taxe Intérieure de Consommation sur le Gaz Naturel)
UNFCCC	United Nations Framework Convention on Climate Change
UVEK	Eidgenössisches Department für Umwelt, Verkehr, Energie und Kommunikation
VAT	Value-Added Tax

Executive Summary

Momentum is increasing globally for the implementation of carbon pricing as a means to cost-efficient climate mitigation. At the same time, carbon pricing, whether through an emissions trading system or a carbon tax, often faces contestation and public resistance. Against this backdrop, the present study investigates key aspects in policy design and carbon pricing communications that help build support for the policy and contribute to its longevity.

In six case studies of carbon pricing initiatives from four continents, the study examines how policy design – including scope of coverage, price level and trajectory, and revenue usage – and communication – how it is talked about with different stakeholders and how central issues and concerns are addressed – interplayed with other factors and contributed to the success or failure of different carbon pricing policies. The case studies were chosen taking into account the significance of the policies, diversity of outcome, and geographical representation.

Among the cases reviewed are the Swedish carbon tax, which is one of the earliest carbon taxes in the world and currently stands as the highest carbon price globally; the British Columbian carbon tax, which is the first in North America and one of the broadest worldwide; the Swiss carbon tax, which is relatively high by global standards and is known for its innovative revenue recycling through the health insurance system; the French carbon tax, whose opposition in the form of the Yellow Vest movement has captured much of the recent attention to carbon pricing; the Australian Carbon Pricing Mechanism, which was repealed quickly after its introduction; and the Colombian carbon tax, which presents one of the first examples of carbon pricing in Latin America.

While each of these cases provides unique lessons we systematically compare how different factors often considered relevant in the durability of carbon pricing policies play out across cases. Among other things, we find that the French case diverges from more successful cases across a large number of relevant dimensions, providing a “perfect storm” for significant opposition. At the same time, the analysis also shows that there is no certain recipe for success. Also carbon pricing policies like the Australian Carbon Pricing Mechanism that are seemingly robust in terms of policy design and underpinned by a deliberate communications strategy can suffer quick defeat when the broader policy context is challenging.

We conclude by combining insights from this study with prior work, deriving some lessons learned and providing recommendations for successful carbon pricing communication. In particular, we note the importance of good communication that is tailored to stakeholders but internally consistent, of testing messaging, of labelling policy instruments favourably (avoiding the often negative connotation of “tax” and emphasising positive environmental effects), of directing revenue toward the goal of the policy and addressing distributional issues, and of convincingly addressing concerns around fairness and carbon leakage.

Introduction

- **Carbon pricing is on the rise:** The pricing of CO₂ emissions – in particular through taxes and emissions trading systems (ETS) – is increasingly gaining importance as a **central component of national mitigation strategies**. Around 20%¹ of global emissions are already covered by implemented or scheduled carbon pricing, and the trend is rising.
- **Ambitious policies are few and often face resistance:** While carbon prices are often low compared to what is considered necessary to achieve the goals of the Paris Agreement² some jurisdictions – e.g. Sweden, Switzerland and British Columbia – have moved forward with ambitious carbon prices. Furthermore, countries such as Colombia, Chile and Singapore are moving ahead with carbon pricing but have to-date kept prices very low. Others, such as France and Australia, have sought to introduce ambitious pricing but faced significant hurdles.
- **Good communication of carbon pricing is necessary:** Importantly, **the more significant carbon prices become, the more important good communication becomes** to ensure continued political support. We thus focus on successful and less successful cases to gauge what can be learnt about communicating carbon prices. Beyond combining insights from these cases, we draw on existing work, particularly the “Guide to Communicating Carbon Pricing” (PMR & CLPC 2018).
- **Carbon prices are effective and have significant revenue generation potential:** The pricing of CO₂ emissions is generally considered to be an **effective climate protection tool**. Depending on the implementation, **considerable government revenues** can also be generated and used to finance climate protection projects; to underpin the transition to a sustainable economy and energy supply; or to compensate particularly affected and vulnerable groups.
- **Politics are challenging due to invisible benefits, but visible costs:** Because a carbon tax works indirectly through changing economic incentives, it does not provide clearly visible benefits in a way that more direct policies, e.g. subsidies for home insulation, provide. **However, as it establishes an explicit price, the costs are very visible.** This structure of partially invisible benefits combined with visible costs has historically made carbon prices vulnerable to strong political opposition.

The persistence of carbon prices and increase of the tax rate is subject to country-specific factors: In Australia, France and the Canadian provinces of Ontario and Alberta, where carbon pricing was implemented or planned, strong and organized opposition has weakened, blocked or even reversed implementation. On the other hand, jurisdictions such as Switzerland and Sweden, as well as the Canadian province of British Columbia, **have successfully introduced and strengthened carbon prices over long periods of time.**

¹ <https://carbonpricingdashboard.worldbank.org/>

1 Case study: Carbon pricing in Sweden

1.1 Introduction and development of the carbon tax

- The carbon tax in Sweden was introduced in 1991 as part of a **comprehensive tax reform including a reform of energy taxation**. It is levied as a tax on energy carriers by carbon content. Other energy taxes exist (e.g. to reduce other pollutants) as well as a historically high energy tax (incentivizing reduced energy use) levied by energy content (the energy tax).
 - Since then, it has been adjusted and increased several times. Simultaneously with the introduction of the carbon tax, the energy tax – levied by energy content rather than carbon – was reduced by 50 percent.
 - At the time of introduction, the carbon tax was around EUR 20/tCO₂. It is currently at about EUR 114/tCO₂. While about half of the tax revenue is allocated to **the federal budget**, the other half is **utilised to finance energy-policy measures and income-tax reductions** (Carl & Fedor, 2016; Swedish Government, 2019).
 - Sweden announced the design of the carbon tax early to hold public consultations in advance of legislative approval and the tax's gradual increase. Thus, households as well as companies had **sufficient time to prepare** for the financial implications of the tax.
 - **Stakeholder criticisms raised in advance** included **concerns about an increase in the overall tax burden** as well as **negative effects on industry and the economy**. In addition, the effectiveness of **Sweden's unilateral approach** to solving a global problem (carbon emissions) was questioned (Scharin & Wallström, 2018).
-

1.2 Distributional as well as fairness issues and corresponding solutions

- In order to reduce the carbon tax's effect on the poor, its introduction was accompanied by a simultaneous reduction of the **energy tax and income taxes for low-income households**.³
- The carbon tax historically differentiated between a higher tax rate for end consumers (transport, heating) and a lower tax rate for industry to protect against carbon leakage. To further decarbonise and cushion the tax's impact, complementary instruments – many of them preceding the carbon tax – have been promoted (such as district heating, bioenergy, building insulation, and improving the public transport infrastructure) across sectors.
- The **significant revenues** from the carbon tax flow into the Swedish budget, from which funding is regularly made available to soften the burden of the carbon tax (e.g. in order to finance other climate-related measures and to address **distributional issues**).

1.3 Communication tools in the process, main issues and public responses

- The design and implementation of the carbon tax resulted from **a commission formed in 1988** to explore **economic instruments for environmental policy**. The commission consisted of representatives of the political parties, the steel and petrochemical industries, the Swedish Farmers' Association, the Swedish Trade Union Confederation, and the Swedish Environmental and Nature Conservation Agency (Scharin & Wallström, 2018).
- In order to secure public support for the carbon tax, **participation processes** were carried out with various interest groups of Swedish society. Only after consulting the public, **the bill was introduced** in the parliament.
- The carbon tax was introduced in 1991 as part of a **comprehensive tax reform**. This meant that the introduction of the carbon tax **received limited attention by the general public** (Scharin & Wallström, 2018).
- The Swedish population overwhelmingly regards climate change as a real problem, which strengthened **public acceptance** for the measure. The **bipartisan consensus** on the carbon tax contributes to high public support as well.

1.4 Criticism / concerns of different stakeholders and consideration by political leaders

- **To avoid negative implications for industry and competitiveness** the risk of carbon leakage was mitigated through **exemptions and lower tax rates for emissions-intensive industries** and higher taxation of other sectors not threatened by leakage, in particular households, transport, and services (*two-tier tax system*). With the introduction of the EU ETS covering industry, industrial emissions were gradually completely exempted from the carbon tax to avoid double regulation.
- The rising carbon tax burden was compensated by reducing other taxes such as the energy tax and income taxes (especially for low- and medium-income groups) (Åkerfeldt & Hammar, 2015). This helped to avoid an **increase of the overall tax burden**.
- The Swedish government is **cushioning the burden** with countermeasures such as improved public transport infrastructure to avoid **disproportionate burden on certain groups** (e.g. car commuters).
- **To avoid the problem of limited access to low-carbon alternatives** the **availability of alternative options** has been expanded to make the switch to low-carbon options more attractive (e.g. district heating). In addition, budget funds were used to further stimulate the transition (e.g. through incentives for the use of bioenergy, expansion of district heating, building insulation).

1.5 Lessons learnt from the Swedish case and possible implications for other contexts

- The design of the carbon tax as well as embedding and linking it to a **comprehensive tax reform** are considered good practice. Furthermore, **early stakeholder involvement** proved to be successful in building trust and gaining support for the proposed policies (Scharin & Wallström, 2018).
- By establishing feasible **low-carbon alternatives**, the government enabled consumers to actually respond to the price signal by switching to low-carbon alternatives.
- If, as in Sweden, a high **environmental awareness** exists, a carbon tax can be **better promoted** to the public (World Bank, 2018).

2 Case study: Carbon pricing in Switzerland

2.1 Introduction and development of the carbon tax

- **Under the CO₂ act**, enacted in 2000, the federal government can implement and increase a carbon **incentive tax** on **fossil fuels** if the **national emission reduction targets** are not reached through voluntary and other measures (Bundesamt für Umwelt, Wald und Landschaft, 2004).
- The rate was set at CHF 12/tCO₂ when the tax was introduced in 2008 and is **increased as soon as a target shortfall is apparent**. The carbon tax is capped at CHF 120/tCO₂ and is currently at CHF 96/tCO₂ (Bundesamt für Umwelt, 2018a).
- **Fossil fuels for transport are explicitly excluded from the carbon tax** in order to prevent a decline in fuel tourism and the associated revenue shortfall from the mineral oil tax.

2.2 Distributional as well as fairness issues and corresponding solutions

- The carbon tax is an incentive tax from which revenues must be redistributed to the population. This is done via compensation payments through the obligatory health insurance system.
- This method was chosen because health insurers are in possession of the most **up-to-date address directory** of all residents in Switzerland. **Employers** receive a compensation payment for the tax paid through the old-age and survivor's insurance (OASI), the compulsory **pension system** (Bundesamt für Umwelt, 2018b).
- Since 2010, only two thirds of the revenues are returned to the population and the economy on a pro-rata basis, while **around one third** (capped at CHF 450 million) is **earmarked** for a programme for energy-efficient **building refurbishment**. An additional CHF 25 million per year goes to a fund **for the promotion of low-emission technologies**.
- In 2018, all people in Switzerland covered by health insurance received a **flat rate compensation payment** of CHF 88.80. CHF 492 million were distributed to businesses, with each company getting back 1.475‰ of the pension payments made (Bundesamt für Umwelt, 2017b).

2.3 Communication tools in the process, main issues and public responses

- When it became clear in 2004 that the national mitigation targets would not be achieved in the absence of a tax, the exact modalities of the incentive tax had to be negotiated. Therefore, in 2004-2005, the established Swiss public consultation process on draft laws

and regulations was held, a process where **all relevant interest groups can comment** on the drafts in writing. A consultation process took place again in 2009 before the revision of the CO₂ act to set targets for 2020, and in 2017 to revise the act to set targets after 2020 (UVEK, 2005; Bundesamt für Umwelt, 2009; Bundesamt für Umwelt, 2017a).

- Since 2004, when the modalities for the introduction of the tax were debated, the central element of public communication has been emphasising that the carbon tax is not a normal tax but an ecological **incentive tax** that rewards energy-efficient behaviour and sets corresponding incentives for the economy and individual energy consumption while, through the recycling of the revenue, **not leading to a higher tax burden** (Bundesamt für Energie, 2004).
- Numerous interest groups were involved in the **lengthy but very inclusive process** for the development of the carbon tax. A first attempt to introduce such a tax failed in 1994 due to opposition from interest groups, but the government **stipulated the possibility of a carbon tax in the 2000 CO₂ act**.
- The carbon tax was introduced in the CO₂ act as a **subsidiary** (backstop) **policy instrument** that would only be applied in case the industry did not take appropriate measures to achieve Swiss mitigation goals. This **“backstop” character is a central argument in the communication of the tax up to today**, as companies can be exempt from it if they agree to binding emission-reduction targets with the government.
- While the negotiation processes were very difficult, especially at the beginning, the **carbon tax is now firmly established** and, despite the recent failure to pass a revision of the CO₂ act in parliament, it was not questioned in principle (Ingold & Varone, 2011).
- In its **public communication**, the government emphasizes the **redistribution** of contributions made and, increasingly so, the earmarking part of revenues to **promote environmentally friendly measures**.
- Studies of the early implementation have shown that only a small part of the population knew about the redistribution via health insurance premiums (Carrattini, Carvalho & Fankhauser, 2018). Since then, this fact has been **communicated more proactively**. Now every insured person receives a **letter accompanying the health insurance statement** titled **“Why you receive XY francs”**. The letter explains where the money comes from and why an environmental tax makes sense and benefits the population. Further, it explains that the levies are redistributed back to the population (i.e. not the same as general taxes) and are paid out by the health insurance funds (Bundesamt für Umwelt, 2017b).
- According to a study undertaken in 2016, the key success factor for political acceptability is not to reduce the tax burden per se, but to **earmark it for specific environmental purposes and per-capita flat rates**. The study argued that redistributing revenue for non-environmental purposes would be more difficult to communicate to the population (Bundesamt für Energie, 2016). This coincides with the experience of a very clearly rejected referendum in 2015 on the introduction of a general carbon tax as a substitute for the value-added tax.

2.4 Criticism / concerns of different stakeholders and consideration by political leaders

- A significant compromise in the negotiation of the incentive tax was **the exception for transport fuels**. In return, the association of fuel importers/distributors (*Erdölvereinigung*) committed to introduce the ***Climate Cent***, a levy of CHF 0.015 /L of fuel. The proceeds were used to purchase emission-reduction certificates **from Switzerland and abroad** in order to close the gap between the voluntary measures and the mitigation targets of the CO₂ law (Brönnimann et al., 2014).
- An **expansion of the carbon tax** to fuels was also discussed again in the course of negotiations on the revision of the CO₂ act, but it did not find majority support. Likewise, a majority of business representatives insists that the levy should **continue to apply only as a subsidiary instrument** when agreed emission targets are not met.

3 Case study: Carbon pricing in British Columbia

3.1 Introduction and development of the carbon tax

- As part of a series of climate initiatives, British Columbia introduced a carbon tax on **circa 70 percent of its emissions in 2008** (Murray & Rivers, 2015). The carbon tax was designed as a revenue-neutral policy, which guaranteed the redistribution of its revenue to the public and the economy through **tax credits for the public and tax breaks for the economy** (Ministry of Finance British Columbia, 2008). This was the core message behind the communications strategy.
- The **predictability** of how the price would develop was a key factor in its implementation: Starting with CAD 10/tCO₂ the tax would be increased by CAD 5/tCO₂ annually to reach CAD 30/tCO₂ by 2012 (Ministry of Finance British Columbia, 2018). Popular support for the tax **increased over the time of its implementation** (see below).
- The absence of a national or regional carbon pricing system led the liberal provincial government to **freeze the price of carbon** in 2013 until other provinces or the national government would introduce carbon pricing schemes of their own (Pembina Institute, 2014). A change in the provincial government and the national Pan-Canadian Framework on Clean Growth and Climate Change led to the re-introduction of the annual price increase in April 2018. Since April 2019 the carbon tax is CAD 40/tCO₂ and is expected to rise to CAD 50/tCO₂ in 2021 (Ministry of Finance British Columbia, 2018).

3.2 Distributional as well as fairness issues and corresponding solutions

- The communications strategy centers around the **revenue-neutral component** of the carbon tax. This includes:
 - The reduction of the income and trade taxes.
 - **“Climate Action Tax Credits”** are distributed four times a year to low-income households. The amount depends on the number of household members and the net income of each household. For the period July-October 2018, beneficiaries received CAD 135, as well as CAD 135 for their spouse/partner, and an additional CAD 40 per child. Single parents received CAD 135 for their first child. These policy aspects establish the carbon tax as a progressive tax and make positive cash flows visible to the public (Beck, Rivers, Wigle, & Yonezawa, 2015; Lammam & Jackson, 2017).
- Tax cuts and subsidies introduced in the past years for the agricultural sector and rural communities have led to the net tax burden dropping to zero.
- The reintroduction of the yearly tax increases also aims to strengthen redistribution in such a way that half of the population of British Columbia can benefit from it. In addition to the reintroduction, the Climate Action Tax Credits were increased and a “Clean BC Program” launched to maintain industry competitiveness while encouraging new green initiatives. The **Clean BC Program for Industry** directs an amount equal to the

incremental carbon tax paid by industry above \$30/ton into incentives for cleaner operations that reduce the tax for companies that can prove to meet **low-carbon benchmarks** as well as an industry fund to support emission reduction projects (British Columbia, 2019).

3.3 Communication tools, main issues and public responses

- The **high level of environmental awareness** among the public, the low-emissions energy system and the centre-right government with close ties to industry, as well as the personal commitment expressed by the prime minister, were factors that contributed to a favourable political context for the introduction of a carbon tax (Clean Energy Canada, 2014). However, scepticism among industry and low-income and rural populations had first to be overcome.
- The government emphasized in its communication that the carbon tax would not have **any negative impacts** on the province's economic growth. It also made clear that the overall tax burden would not rise due to the carbon tax. The government used terms such as *price on pollution* and *incentive to reduce pollution* instead of tax, as studies indicated this would be more easily accepted by the public (Carattini, Carvalho & Fankhauser, 2018).
- The government also indicated in its budget planning that the tax would **function as a market signal** to reduce emissions. In order to appease voters' fears that redistributive measures could be phased out, it mandated the Ministry of Finance to submit yearly three-year plans on how to best redistribute revenues (Ministry of Finance British Columbia, 2008).
- Surveys indicate that the early concerns brought by the public were addressed to their satisfaction, leading to a **high popularity of the carbon tax** among citizens (Carattini, Carvalho & Fankhauser, 2018).

3.4 Criticism / concerns of different stakeholders and consideration by political leaders

- Public approval of the carbon tax rose despite the tax tripling between 2008 and 2012 (Murray & Rivers, 2015). By 2011, the majority of the population approved it. Bipartisan support for the tax was maintained after the 2013 election. **Focusing on social aspects** in the communication strategy contributed to the significant approval of the policy (Carattini, Carvalho & Fankhauser, 2018).
- **Further measures were adopted** over time to address the scepticism of certain groups of the population and industry. Since 2009, homeowners in the north of the province and in rural areas have been receiving annual grants to compensate increased heating costs. The agricultural sector has benefited from **certain tax exemptions** since 2013. 2013 also saw the increase in carbon price suspended, as a reaction to the pressure applied by industry, which claimed the tax had become a burden in the face of strong international competition (Clean Energy Canada, 2014).
- In order to prevent this kind of criticism in the future, the government introduced, along with the carbon price increase in 2018, an increase of the **Climate Action Tax Credit** and introduced the Clean BC Program for industries (British Columbia, 2019). This support

was justified by the government as a way to avoid carbon leakage. Companies which meet their sector's global benchmark of low carbon intensity are granted exemptions from the carbon tax. Tax revenues are also allocated for the promotion of low-emissions technology use.

4 Case study: Carbon pricing in Australia

4.1 Introduction and development of the carbon tax

- The Carbon Pricing Mechanism (CPM) was introduced in Australia as part of a **federal legislation** in 2011. It consisted of a hybrid scheme that incorporated elements of both emissions trading schemes and carbon prices. It included a **transition period** for its first three years, during which the carbon price was fixed at AUD 23 (USD 20.39) (resembling a carbon tax), meaning that entities covered by the scheme had to pay a set carbon price per ton of CO₂-eq emitted. The carbon pricing scheme would then transition to a full ETS with the carbon price determined by supply and demand for carbon units (Australian Government, 2011).
- The scope of the mechanism covered electricity generation, industry, waste and fugitive emissions, making it one of the most comprehensive carbon prices adopted to date. In total, the mechanism covered **around 60 percent of domestic emissions** and imposed obligations on over 350 large emitters. It was also one of the few mechanisms that targeted **downstream emissions** (i.e. price set at the point emissions are released into the atmosphere) with a threshold of 25,000 tCO₂. Moreover, the CPM included provisions to use offsets generated domestically and internationally (Australian Government, 2011).
- While all major parties generally supported a national carbon pricing policy until 2009, Australia's Liberal Party dropped its support in 2009, at the same time the international negotiations in Copenhagen failed to deliver a new climate agreement (Peel, 2014). Political turmoil followed in Australia, where both the prime minister and opposition leader, **both of whom had until then pushed for an ETS**, were replaced. The Labour Party leader, Julia Gillard, won the 2010 elections, promising during her campaign that she would not support a carbon tax. However, to form a government, Labour joined a coalition with the Greens. A key condition on this deal was the introduction of a carbon price (Peel, 2014). The Australian opposition proceeded to lead a **campaign of strong opposition** that was backed by large swaths of the media and was a key factor in the opposition's success in the 2014 election and subsequent repeal of the carbon price (World Bank, 2018).

4.2 Distributional as well as fairness issues and corresponding solutions

- In order to reduce the financial burden of the CPM on the cost of living, the government assigned over half of the mechanism's revenue to social measures to support households. As part of a '**household assistance package**' (HAP) implemented alongside the CPM, tax reform measures, allowances and benefits, as well as flat payments were introduced. These flat payments consisted of direct financial transfers to vulnerable groups, including low- and middle-income households and pensioners, meant to compensate the increased cost of living associated with the CPM. Another 40 percent of the revenue went **towards supporting job creation, targeting emissions-intensive and trade-exposed industries** (EITE) in particular. Moreover, the government also allocated funds to encourage innovation in clean energy and improve energy efficiency (Australian

Government, 2011). Finally, part of the revenue was allocated to the purchase of offsets and to the **Clean Energy Finance Corporation** (a green bank) (PMR & CPLC, 2017).

4.3 Communication tools in the process, main issues and public responses

- The main communications tools used by the Australian government were extensive consultations, **careful naming of the policy** and a **media campaign**. Moreover, the government used economic modelling exercises to provide a strong evidence base for its messaging.
- The use of the term CPM aimed to reflect the hybrid nature of the policy. However, this was not clearly captured, as the complex nature of the carbon tax contributed to it not being easily communicated in simple terms. This is particularly true for the **transition period that featured a fixed price resembling a carbon tax**. While both politicians and economists communicated that the CPM was technically not a tax, the opposition's repeated framing of the mechanism as a tax, and the general **distrust of the public** in experts, reinforced this notion among the public and the media (World Bank, 2018).
 - While the CPM was officially a hybrid system that would ultimately transition to an ETS, the early opposition to the carbon pricing instrument, primarily led by the Liberal Party, allowed opponents to influence the narrative. They quickly dubbed the CPM as a "carbon tax" and a "tax on everything".
 - During the 2013 federal election, liberal leader Tony Abbot famously campaigned with the slogan: **"Axe the Tax"**. This contributed to the proponents of the CPM taking a defensive strategy of claiming the policy was not a tax.
- A million-dollar **advertisement and social media campaign**, which included the celebrity actor Cate Blanchett, sought to bring public support for the CPM. This campaign was not tested with the public before being rolled out, however, and was heavily criticized by the Liberal party and the press (Pearse, 2017). The government did not foresee the mechanism being associated with wider issues of **trust, elitism, and legitimacy** (World Bank, 2018).
- The Australian government undertook **extensive modelling** to examine the relationship between carbon price levels, abatement outcomes and impact on households. The results of this exercise were used to support government messaging around the relatively low impact of the CPM on households, and how these impacts were being addressed through the HAP (World Bank, 2018). However, this approach had **relatively limited impact in the face of intense media criticism** centred on the costs of the scheme, with opinion polls indicating Australians in fact overestimated the impact of the CPM on energy costs (McGuirk et al., 2014).
- The design and communication of the policy also involved significant political discussions, including **extensive expert- and public consultations** (Peel, 2014). However, a proposal by the Prime Minister to discuss the carbon price in a citizens' assembly before its introduction was **opposed by politicians** who claimed it could undermine the parliament.

4.4 Criticism / concerns of different stakeholders and consideration by political leaders

- Australia's carbon pricing mechanism was a well-designed policy which reflected many years of policy development (Jotzo, 2012). Nonetheless, the policy faced intense and sustained criticism from the **opposition and key sections of the media**, in particular publications owned by the conservative News Corporation Australia, which accounts for 57 percent of daily newspaper circulation (Molineaux et al., 2016). Criticisms from these groups frequently focused on **the alleged impacts the policy** would have on ordinary Australians, though they also included outright denial of climate change and therefore of the relevance of the CPM (Tranter & Booth, 2014).
- While the government sought to challenge these criticisms, the intensity and consistency of the attacks coupled with the absence of a comprehensive communications strategy meant it was often in the defense and therefore not in a position to set the terms of the debate. An early and sustained campaign with honest and simple messaging framing the CPM as a mechanism that **made big polluters pay for their environmental damage** while protecting ordinary Australians through the HAP may have preempted the opposition's framing of the mechanism as a "great big tax on everything").
- Moreover, the government failed to anticipate concerns and misinformation early on in the process (World Bank, 2018). This contributed to advocates facing an uphill struggle to defend the policy, as well as a growing division on the issue between parties and the public. An example of this was **how opponents blamed carbon pricing for increasing electricity prices** despite the carbon price not being the main driver. The government found it difficult to successfully challenge this assertion (World Bank, 2018). In reality, the main driver behind the increasing electricity prices was the cost of extra investments in the ageing electricity distribution infrastructure.
- The legislation that introduced the CPM was passed by a **minority Labour government** supported by the Greens party and independent Members of Parliament (Jotzo, 2012). This may also have increased the unstable position of the policy, indicating the challenges of sustaining a carbon price without broad-based political support.

5 Case study: Carbon pricing in France

5.1 Introduction and development of the carbon tax

- In 2014, a **carbon tax** in France was **introduced** by then-President François Hollande as a surcharge to existing taxes in the **non-ETS** sectors, starting at a rate of EUR 7/tCO₂ and reaching EUR 30.5/tCO₂ in 2017. To align with the French target to cut fossil-fuel consumption by 40% by 2030 (compared to 1990 baseline), the carbon tax scheduled to reach **EUR 100/tCO₂ in 2030**.
- The carbon tax is technically not a new tax but a price component (*Contribution Climat-Énergie, CEE*) added to **three existing domestic consumption taxes**, namely the taxes on fuels (*Taxe Intérieure de Consommation sur les Produits Énergétiques, TICPE*), on heating gas (*Taxe Intérieure de Consommation sur le Gaz Naturel, TICGN*) and on coal (*Taxe Intérieure de Consommation sur le Charbon, TICC*). They apply to households as well as companies in the non-ETS sectors.
- The carbon component was initially to be **annually increased** up to EUR 39/tCO₂ in 2018 and EUR 47.5/tCO₂ in 2019. After President Emmanuel Macron came into office in 2017, he **accelerated the planned rate of increase** to EUR 44.6/tCO₂ in 2018 and EUR 55/tCO₂ in 2019 (IPP, 2018).
- In 2015, **overall taxes** on gasoline amounted to **roughly EUR 275/tCO₂** and **roughly EUR 175/tCO₂** on diesel. These totals combine all existing taxes on domestic consumption as well as the carbon tax introduced in 2014 (OECD, 2018).
- In 2017, the French carbon component translated to a surcharge of EUR 0.07/L on gasoline and EUR 0.08/L on diesel, with gasoline priced at EUR 1.37/L and diesel priced at EUR 1.24/L on average in 2017, corresponding to 5.4% and 6% of the total price respectively. The projected tax increase of TICPE for 2019 would have raised the gasoline price by an additional EUR 0.04/L (+ 2.7% on the average price of EUR 1.47/L in 2019) and the diesel price by EUR 0.07/L (+ 4.8% on the average price of EUR 1.45/L in 2019). This 2019 increase would have reduced the carbon-taxation differential between gasoline and diesel.
- However, responding to protests of the Yellow Vests movement (*Gilets Jaunes*), the government first **postponed the planned increase** of the carbon tax for six months in December 2018 and later **suspended it for 2019** (The New York Times, 2018).

5.2 Distributional as well as fairness issues and corresponding solutions

a) Use of revenue:

- From 2014 until 2017, carbon-tax revenue was mostly used **to increase employment and competitiveness of companies** (through the *Crédit d'Impôt pour la Compétitivité et l'Emploi, CICE*) and to finance the energy transition (e.g. by providing incentives for electric vehicles). Of the EUR 5.4 billion of carbon tax **revenues** in 2017, EUR 1.7 billion were earmarked to **finance the energy transition**, while the remaining EUR 3.7 billion

were used for the CICE. The additional revenue increase projected for the tax rise in 2019 was not earmarked to further finance the energy transition.

- There was very limited awareness among taxpayers on the **earmarking** of the carbon tax due to a lack of clear communication. Regarding the planned 2018 tax hike, there was criticism of the fact that most of the additional **revenues** from the accelerated tax-rate increase would flow to the **national budget** instead of the French *départements* and regions (Agora Energiewende, 2019).
- In 2017, the Macron government introduced some **social cushioning measures**, ranging from an electric vehicle conversion premium to financial support for low-income households' energy bills and funding for home insulation with a focus on low-income households, yet these did not alleviate burdens in the transport sector (see below) (French Government, 2017).

b) Fairness issues and perceptions and the rise of the Yellow Vest movement:

- Even after revenue recycling, the carbon tax has been shown to **disproportionately burden low- and middle-income households** since they spend a larger share of their income on fuels (regressive) (IPP, 2018).
- The **decision of the Macron government** to increase the carbon tax **coincided with an increase in oil prices in 2018, spiking in October 2018** Together with **simultaneous cuts to welfare benefits and the wealth tax**, this added to a general perception of rising social inequality and led to the eruption of the **Yellow Vest protests** in October 2018 (Agora Energiewende, 2019).
- The focus of the Yellow Vest movement was on the proposed **increases on gasoline and diesel taxes** (for which only few social cushioning measures were in place) and on the numerous exemptions from the carbon tax, e.g. for air and goods traffic as well as farmers, which added to a general perception of rising social inequality. Protests were intense and have been extensively covered in the global media.
- The Yellow Vests movement especially appealed to **low-income households** in the countryside and small towns.
- More generally, **pensioners** and the **rural population** are considered to **be hit the hardest** by the earlier **Macron reform package** of 2017, while the richest one percent gained significantly (IPP, 2019). This, together with the decisions to **cut wealth taxes and social benefits** in the 2019 budget gave rise to an increasing perception of social injustice. President Macron was dubbed the **“president of the rich”** (The Guardian, 2018).

5.3 Communication tools in the process, main issues and public responses

- When introducing the carbon tax in 2014, no public consultation process took place. There was also no specific communication effort by the government regarding the planned carbon tax increase.
- In response to the Yellow Vest protests and the resulting political turmoil, President Macron launched a **“Grand Débat National”** (15 January – 15 March, 2019), a large-scale public consultation process throughout France, offering citizens a **platform to**

participate and express their opinions. One main topic was the “**ecological transition**” (*la transition écologique*). With more than 10,000 local gatherings and 1.5 million individual contributions, it generated a vast amount of data on public perceptions of the carbon price (French Government, 2019).

5.4 Criticism / concerns of different stakeholders and consideration by political leaders

- During the “*Grand Débat National*”, key points of criticism regarding the carbon tax have been the **lack of transparency in revenue recycling** and **concerns of rising social injustice**, especially in rural areas (“we have to pay more for gasoline, while the rich fly without paying taxes”).
- Moreover, citizens raised the issue that **big companies** and several subsectors (e.g. aviation, freight, agriculture) are taxed at a lower rate than ordinary citizens due to **several exemptions** in place.
- In March 2019, 19 civil society organisations and trade unions proposed a “**social and ecological pact**”, demanding both the **redistribution of all carbon tax revenue to households** as well as financing the renewable-energy transition (CFDT, 2019).
- As a response to the results of the “*Grand Débat National*” published in April 2019, **President Macron announced several tax cuts** for the middle class and **no further increases to the carbon tax** (The Washington Post, 2019).

5.5 Lessons learnt from the French case and possible implications for other contexts

- The increase of the carbon tax coincided with an extensive reform package perceived as **socially unjust** and **lacking compensatory measures**, leading to public opposition.
- Instead of using **tax revenues** only for national budget priorities, putting a strong emphasis on **compensating measures for citizens would have likely led** to greater political and social acceptance. Social cushioning measures should be focused on target groups that are most exposed to the carbon tax and communicated in a **transparent and clear way**.
- When carbon prices are raised, **low-carbon alternatives** should be made easily accessible for both companies and individuals in order to secure public acceptance. This could be observed in France where – through electric heating and low-carbon electricity – the heating sector is much more decarbonized than the transport sector. Consequently, citizens are considerably less exposed to carbon prices in the heating sector than in the transport sector. While the Yellow Vests protests were primarily directed at rising transport fuel prices, the increasing prices for fuel-based heating systems have not been an issue of public concern.

6 Case study: Carbon pricing in Colombia

6.1 Introduction and development of the carbon tax

- Colombia introduced a national carbon tax in 2016 within the context of a broader structural reform of the revenue collection system. The tax entered into force in 2017 (MADS, 2017).
- The carbon tax is applied to the sales and imports of **all fossil fuels except for coal**. It **covers 16% of Colombia's total greenhouse gas emissions** (Carbon Trust, EDF & IETA, 2018).
- The tax is levied on domestic fuel sales, fuel extraction for self-consumption, and fuel import. It is only imposed once, depending on whichever action occurs first (MADS, 2017).
- **Colombia's carbon tax corresponds to a rate of COP 15,000/tCO₂** (approximately USD 5/tCO₂). It is **set to increase annually by 1% plus inflation** until the rate reaches approximately USD 10/tCO₂ (Government of Colombia, 2016, Art. 221).
- The expected tax revenues are approximately USD 220 million per year (Carbon Trust et al., 2018). In 2017, the revenues from the carbon tax were COP 477 billion (approximately USD 142 million) and in 2018 COP 294 billion (approximately USD 87 million) (Minihacienda, 2019). **Tax revenue is thus significantly below expectations.**

6.2 Distributional as well as fairness issues and corresponding solutions

- In order to reduce the tax burden on companies and to stimulate investments in emissions-mitigation activities, entities can achieve partial or total exemption by submitting carbon offset certificates that conform to specific criteria (Government of Colombia, 2017). As a result, 3.6 million Certified Emissions Reductions (CERs) generated under the Clean Development Mechanism (CDM) were voluntarily cancelled in close to 400 transactions for projects in Colombia (UNFCCC, 2019).
- Revenues of the carbon tax are distributed as follows: **25% for adaptation financing**, specifically to reduce coastal erosion, conserving strategic ecosystems, and water sources conservation; **5% to the National System of Protected Areas**; and **70% to finance post-conflict actions** (Government of Colombia, 2018a, Art. 26). Initially, revenues were channeled through the Fund for Sustainable Environment and Rural Sustainable Development (Government of Colombia, 2016). However, in 2018, **the Peace Fund of Colombia was defined as the main recipient, receiving 70% of the revenues**. Its objective is to support the Final Agreement of Peace (*Acuerdo Final de la Paz*) of 2017 through the substitution of crops, local development plans, and general social development programs (Government of Colombia, 2018b).

6.3 Communication tools in the process, main issues and public responses

- In Colombia, public and private stakeholder participation is secured through the National System of Climate Change (SISCLIMA), which assembles state, private, and non-profit entities (Carbon Trust et al., 2018).
- The carbon tax introduction was carried out as **part of a major tax reform** with the goal to increase tax revenues that were under pressure due to a fall in oil-tax revenues. The reform included inter alia an increase of VAT by 3% and the introduction of a withholding tax for foreign activities in Colombia (Government of Colombia, 2016; MADS, 2017). In this context, little debate about the carbon tax, set at a low rate, took place.
- The government stated that the tax should bolster national efforts to reduce CO₂ emissions, **discourage the utilisation of fossil fuels, and promote more efficient technologies** in order to achieve the commitments made under the Paris Agreement (MADS, 2017; Government of Colombia, 2015).

6.4 Criticism / concerns of different stakeholders and consideration during tax implementation

- When the carbon tax was proposed in 2016, **leaders from different industrial groups expressed their concerns** of additional costs for the final consumers and reduction of demand. Fuel-association leaders considered that consumers and distributors would be gravely affected with the increase in gasoline prices (El País, 2016).
- Powerful interests linked to coal mining managed to push through an **exemption of coal**. But coal exemption perversely incentivises an increase in coal consumption and mining activities. The Colombian Association of Natural Gas (Naturgas) requested the inclusion of coal in the carbon tax (El Heraldó, 2019).
- The shift in revenues towards the implementation of the Peace Agreement has prompted criticism, as it is seen by various experts as a **diversion of revenues compared to the main original objective of the tax**, which was to support a fund for environmental protection activities in the wider context of the peace process but was then subsumed by the general *Fondo Colombia en Paz* (Cavalier, 2018; CO₂CERO, 2017; Correa, 2018; El Tiempo, 2018; Pardo Ibarra, 2018).

6.5 Lessons learnt from the Colombian case and possible implications for other contexts

- The inclusion of the carbon tax in a comprehensive tax reform allowed supporters to “hide” it in the large package and reduce opposition.
- **Flexibility** on how to comply with the tax through offsets motivates project developers to support the tax and, ideally, create new mitigation potentials through new offset projects. However, much larger submission of offsets than expected led to the need to protect tax revenues and reduce offset eligibility.

- **New offset projects have been developed as a consequence of the introduction of the carbon tax.** An example is the implementation of a reforestation program by CEMEX to neutralize the carbon emissions produced by their vehicle fleet (Correa, 2017).

7 Comparative Analysis of Case Studies

- **Systematic comparison across common elements:** As a basis for drawing conclusions and recommendations, Table 1 below provides a summary of the case studies. It does so by providing nine different elements that have been identified as potentially relevant for carbon pricing durability in the case studies, four related to carbon tax design and five related to carbon tax communication.
- **Common elements, not success factors:** By presenting these elements, we are not implying that they *are* “success factors” necessary and/or sufficient for carbon prices to succeed. Rather, the goal of the table is to *outline* possible elements (or combinations thereof) that might be important in driving carbon price durability.
- **Presence/Absence of elements in cases:** For each carbon price, we classify whether a given element has been present in a given case – on a scale from “strongly present” to “not present at all” with two intermediary stages.
- **A starting point for analysis:** This provides a starting point for analysis, but should not be taken as a final result.
- In this perspective, important **Carbon Pricing Design** elements seem to be:
 - **Is the tax designed to avoid excessive costs for heavily affected sub-populations** (e.g. rural populations or populations with increased needs for heating, etc.)?
This is a salient feature in many jurisdictions that is thought to be important to mitigate the impact on heavily affected populations that may otherwise oppose the policy.
 - **Does the carbon price visibly return revenue to the general population**, targeting specifically the general population and not only heavily affected groups? Returning (part of) the revenue directly to citizens is a component of many carbon prices and often heralded as a key driver of the political feasibility of a revenue-neutral carbon price (see for example Gabriel, 2019).
 - **Is the carbon pricing revenue used to actively promote low-carbon alternatives**, making it easier to ‘avoid’ paying the carbon price and adopt low-carbon behaviour? Opinion polls frequently find strong public support for linking the use of revenue to the overall objectives of the policy, and in particular for directing it to support low-carbon alternatives (see 8.3).
 - **Are low-carbon substitution options available** independent of how carbon pricing revenue is used (i.e. the general resource endowment, prior policies etc.)? The ability to avoid paying the carbon price switching to low-carbon alternatives is often considered important for policy acceptability, making it an important dimension to consider (see e.g. Ackva & Hoppe, 2018). The availability of such options varies widely across jurisdictions and sectors.
- Potential **Carbon Pricing Communication** elements are:
 - **Is the carbon price embedded in a wider tax reform?** Some carbon price introductions have been part of major tax reforms and this is sometimes

brought forward as a potential success factor (e.g. in Sweden, see Ackva & Hoppe, 2018) as the carbon price “hides” within broader changes and the wider tax reform offers the opportunity of not increasing costs of important products (e.g. by offsetting a carbon price introduction with a reduction of a general energy tax).

- **Is the carbon price embedded in the wider climate policy effort** to enable policy makers to communicate more clearly its relevance for climate protection?

This is sometimes argued to be important, framing the carbon price as related to achieving shared social values (climate protection) and/or supporting other popular initiatives/technologies (e.g. renewables, electric mobility) (see 8.3).

- **Has there been an active communication on how distributional issues are addressed?**

The active communication on measures to address distributional concerns has sometimes been found to be important for political acceptability (see 8.6).

- **Has there been a systematic stakeholder engagement process?** This can possibly increase public acceptability both through increasing legitimacy and through addressing critical concerns in the policy design phase (see 8.2).

- **Is the tax labelled as a tax or is it labelled differently?** This might be relevant for the public perception of the tax given that taxes can be perceived quite negatively in some contexts (see 8.4).

	Carbon Tax Design				Carbon Tax Communication				Labelling as tax?
	Avoiding excessive cost for sub-populations	Returning revenue visibly to general population	Actively promoting options for low-carbon substitution	Availability of low-carbon substitution options	Integration in wider tax reform	Embedding in wider climate policy effort	Communicating on addressing distributional consequences	Stakeholder Engagement	
Sweden	Yes (lowered energy tax)	Mixed	Mixed indirectly but not strongly linked in messaging / not mandated	Yes distinct heating and biofuels in transport	Yes	Yes clear communication of tax as central climate policy tool	Yes especially with further increases (labor & income tax reductions)	Yes stakeholder commission formed and participation processes carried out	Yes "Koldioxidskatt" (carbon tax)
Switzerland	Mixed exemptions for companies available, not for citizens	Yes return via health insurance & employer contributions	Yes program for increasing EE in buildings (main covered sector)	Yes electrification and EE in heating and industry (covered sectors)	No	Yes clear communication of tax as central climate policy tool	No	Yes extensive public consultation	No "Lenkungsabgabe" (steering tax), "CO ₂ -Abgabe" (carbon levy)
France	No	No lack of clear earmarking, revenue return mostly benefitted companies	Yes but not very forceful compared to speed of tax hikes.	Mixed Yes for heating (electrification & EE), limited in transport sector	No	Yes	No Opposite effect through tax cuts for the wealthy	No	Yes "Taxe carbone" (carbon tax), "Contribution Climat-Énergie" (climate-energy contribution)

Table 1a: Common Aspects of Carbon Tax Design and Communication

Not present	Somewhat present	Present	Strongly present
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	Carbon Tax Design					Carbon Tax Communication				
	Avoiding excessive cost for sub-populations	Returning revenue visibly to general population	Actively promoting options for low-carbon substitution	Availability of low-carbon substitution options	Integration in wider tax reform	Embedding in wider climate policy effort	Communicating on addressing distributional consequences	Stakeholder Engagement	Labelling as tax?	
British Columbia	Yes (specific subsidies for groups with high heating needs)	Yes reduced income taxes	Yes as a reaction to carbon leakage concerns	Mixed Yes for heating (electrification & EE), limited in transport sector	Yes decrease of other taxes	Yes	Yes	Mixed Only indirect (close government ties to industry)	Yes Carbon tax	
Colombia	Not applicable as there are no significant cost impacts	No shift in planned revenues after one year	No	Mixed Yes for power (electrification, hydro), limited in transport sector; offsets available	Yes introduction of new taxes and increase of VAT	Yes	Not applicable as there are no significant cost impacts	Yes but rather limited	Yes "Impuesto al carbono" (carbon tax)	
Australia	Yes (specific rebates for low-income households)	Yes strong social cushioning measures and return to population	Yes but minor spending category	Mixed generally high carbon intensity in industry and power sector	No	Yes clear communication of tax as a central climate policy tool	Yes	Yes	No Carbon Pricing Mechanism	

Table 1b: Common Aspects of Carbon Tax Design and Communication

Not present	Somewhat present	Present	Strongly present
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This analysis **reveals some interesting patterns**:

- The French case is quite different from many of the other jurisdictions' experiences, varying along many elements of carbon pricing design and communication. A lack of clearly visible revenue recycling, the difficulty of avoiding the tax in the transport sector (lack of low-carbon alternatives), inadequate compensation measures, as well as simultaneous wealth tax cuts and the oil price peak led to the divergent experience of France compared to more successful carbon pricing jurisdictions. Given the multitude of design and communication problems, the French case serves as a "perfect storm" example of an unsuccessful case, where it is difficult to relate the lack of success to a single factor.
- Australia's carbon pricing design and communication is more similar to some of the successful jurisdictions, showing that even a well-designed carbon pricing instrument can be derailed in the context of a highly fossil-fuel driven economy and an unfavourable political climate.
- All successful carbon tax jurisdictions considered pay at least some attention to avoiding excessive cost for socially vulnerable populations.
- All successful carbon tax jurisdictions with significant tax rates (i.e. excluding the Colombian case) have some form of returning revenues to the general population, often very visibly (e.g. in the case of British Columbia and Switzerland).
- Successful carbon taxes have been implemented in the context of wider tax reforms, but also independently.
- While language around "taxation" has sometimes been avoided, this is not always the case. Many successful carbon taxes are referred to as such, e.g. the Swedish but also the British Columbian one. Whether or not "taxation" is a loaded term that needs active avoiding is dependent on the specific context and political discourse.

8 Lessons learned

While carbon pricing remains in relatively early stages of development in many jurisdictions, existing experiences already provide a wealth of valuable lessons that can help governments and other carbon pricing supporters in building and maintaining support for their expansion. This chapter brings together the main insights that these initial experiences offer to future endeavours, both on designing policies to win support and on getting communications and outreach right. In addition to the six case studies included in this paper, it draws on existing publications on the topic, and in particular the *Guide to Communicating Carbon Pricing*, written by Climate Outreach and Climate Focus for the World Bank (PMR & CPLC 2018).

8.1 The importance of integrating policy and communications

- **Strong communication is key to gaining and maintaining support for carbon prices. Good communication is, in turn, built upon trust and credibility.** This can only be achieved where the arguments used to justify the carbon price are coherent with the underlying policy.
- **Strong communications should therefore go hand in hand with a well-designed underlying policy** – the carbon prices that have enjoyed significant longevity have successfully addressed both these elements.
 - Early criticisms of the carbon tax in Sweden, for example, have centred on the policy flaws such as the absence of low-carbon alternatives to taxed fuels, which may undermine the effectiveness of the policy in reducing emissions. Addressing these concerns was important for the policy's acceptance.
 - In France, criticism has additionally focused on distributional implications and the social framing since the policy was connected with tax reductions for the rich and the carbon tax hitting rural/poor populations. Conversely, the Australian experience illustrates how communications failures coupled with a hostile political and media environment can further contribute to the downfall of a policy that is well designed.
- **Targeted and well-communicated revenue use is a powerful strategy for winning support.** In Switzerland, the revenues from the carbon tax are distributed back to population and companies, in other jurisdictions such as British Columbia and Australia, a re-distribution approach was chosen that targets more vulnerable parts of the population. In Switzerland and British Columbia, a part of the revenues is used to promote environmentally friendly technologies and support the transformation of industry.

8.2 Communications and stakeholder engagement as an integral part of the policy-making process

- **A transparent and inclusive policy process in which stakeholders have the opportunity to engage in a meaningful way is central to ensuring broad acceptance of carbon pricing.** This contributed to the successful communication in Sweden and Switzerland. In France, in contrast, the absence of a consultation process in designing the carbon tax at least appears to have contributed to an overall rejection by the public.
- **All carbon prices assessed in this study have been subject to significant criticism and in two cases this has led to the policies being repealed (Australia) or scaled back (France).** Integrating communications throughout the policy-making process can help identify and address potential sources of opposition and lines of attack, as well as to develop, test and adjust messaging, ensure coherence between policy and messaging, and to build alliances with trusted communicators.

8.3 The central role of tailored and tested narratives

- **Different narratives may be needed for different audiences, but they must be coherent.** There is a wide range of stakeholders that need to be brought on board if a carbon price is to gain acceptance. Many of these have different priorities. It is important to adapt lines of argument for these different stakeholders, to match their chief concerns and priorities. Nonetheless, it is crucial to ensure coherence between the different arguments used. The government can consider developing a “meta-narrative”, that defines its overall argumentation for the carbon price, and various “sub-narratives”, that define its argumentation for each specific stakeholder group.
- **Carbon pricing can be more positively perceived if it is part of a comprehensive climate strategy.** In Sweden, for instance, the carbon tax was introduced as part of a package of energy, transport, and climate reforms, which supported the government’s arguments that the tax was a key part of a broader strategy and not simply a revenue raising measure. Similarly, in Switzerland, the presentation of the carbon tax as a fall-back instrument where industry failed to take alternative measures to reach climate goals, coupled with earmarking part of the revenue for environmental projects, was well received. The latter point is consistent with studies indicating the public tends to favour the use of carbon pricing revenue for environmental purposes, as this is seen as consistent with the goals of the policy (Carattini, Carvalho, & Fankhauser, 2018; Kotchen, Turk, & Leiserowitz, 2017).
- **Focusing on non-climate benefits may be more tangible.** The general public can have difficulties understanding what a carbon price is and how it is linked to climate change. A policy instrument which is associated with more tangible benefits that people can see, such as clean air, electric mobility, energy efficiency and green jobs - may be more likely to be accepted than one that is primarily presented as a way to address climate change.

8.4 What's in a name? Getting the label right

- **The name or label given to the carbon price to the public must be well thought out and have a positive undertone.** An early strategy on how to communicate the complexity of the mechanism in simple messages is key. The government of British Columbia for instance, favoured the term 'price on pollution' or 'incentive to reduce pollution', rather than talking about a tax. The Swiss use of the term *Lenkungsabgabe* (i.e. incentive tax) was also well-received as it communicated that the policy was not an ordinary tax, but one designed to incentivise mitigation.
- **Formally labelling a carbon price in a given way may not by itself be enough to ensure public support.** Governments must also seize and keep hold of the popular narrative around the policy. In Australia, despite the government's naming and consistently referring to the policy as the Carbon Pricing Mechanism, the colloquial names used by the opposition and large swaths of the media ("carbon tax"; "tax on everything") caught on, pushing the government into a defensive position where they were debating on the opposition's terms. The challenges in retaining control of the narrative were partially due to the complex design of the policy, whose hybrid character was difficult to understand by the public and whose initial similarity to a carbon tax complicated efforts to rebut the claim it was a tax.

8.5 Addressing leakage, competitiveness and international action

- **Governments need to rebut claims of economic impacts, loss of competitiveness, and leakage:** In the cases studied, private sector stakeholders typically justify their opposition to a carbon price in terms of potential negative impacts on the economy as a whole, loss of competitiveness in specific industries, or leakage of emissions to other jurisdictions. Addressing these concerns and rebutting these claims is crucial for ensuring support for the carbon price.
- **There is a range of arguments governments can use to counter these claims, but they should be tailored and tested before being rolled out.** Some potential arguments are set out in Box 1. Governments can use the results of modelling studies to back up these claims and show that the carbon price will have limited (if any) negative impacts on the economy, as for example the Australian government has done. However, these messages should be thoroughly tested, as the public and key stakeholder groups will not necessarily respond positively to study results or expert opinion. It is also important that these messages are communicated in simple and clear terms, ideally by trusted communicators.
- **Governments should also take pains to differentiate between impacts on a given industry and impacts on the economy as a whole.** Several sectors stand to gain from carbon pricing, and governments should consider engaging with those sectors early on and engaging them as supporters and champions of the policy.
- **Policy compromises can limit negative impacts on economic sectors.** To the extent that key sectors are negatively impacted by a carbon price, the government can consider addressing these impacts while taking care not to limit the effectiveness of the carbon price. For example, British Columbia reduced corporate and labour taxes to compensate

for increased costs due to the carbon tax, while Australia adopted a range of measures to support EITE industries. Governments can aim to ensure that its international trading partners have equivalent emission reduction obligations, for instance through the Paris Agreement and other fora such as the G20. EU countries have collective and individual mitigation targets that are legally binding.

Box 1: Potential arguments to address leakage and competitiveness claims

While carbon prices can create leakage and competitiveness risks, claims made by industry lobbyists about the level of risk are frequently overstated. While it is important to acknowledge and address concerns through policy design, governments also need to have arguments at their disposal to address exaggerated claims. The following provides some examples.

- The 185 countries that ratified the Paris Agreement are under the obligation to reduce their emissions in line with their nationally determined contributions (NDCs). In the EU, all Member States have binding mitigation targets for 2030. These countries have all adopted or will adopt policies to achieve these goals.
- Carbon pricing is the most efficient instrument available for meeting emissions targets while growing the economy and creating jobs. They provide flexibility to private actors, encourage green investment and avoid the red tape that comes with regulations.

8.6 Ensuring the carbon price is fair (and perceived as fair)

- **The social acceptance of the carbon price depends on its perceived fairness.** Fairness and the avoidance of negative impacts on the population as a whole and on vulnerable groups in particular have come through as a key issue in the debate of most cases studied. In some, such as Australia and France, the perceived unfairness of carbon pricing has led to major opposition to the carbon price. In addition to designing the policy in a way that promotes fairness, governments have a range of strategies and arguments at their disposal to promote the carbon price as a fair policy that addresses the concerns of vulnerable groups.
- **Targeted and transparent use of revenues is a key tool for generating support.** It is important to effectively communicate how the revenue from the carbon price is being used to bring benefits to people. In Switzerland, initial low awareness of the government's use of carbon tax revenues to provide rebates to all citizens on their insurance premiums was addressed by sending letters explaining why they were receiving these payments. In France, in contrast, a lack of transparency in revenue recycling, and a simultaneous cut in wealth taxes and social benefits in the 2019 national budget gave rise to a sense of social injustice. Similarly, in Australia the government directed most of its revenue toward support for households, this was not successfully communicated and many people remained unaware of this support.
- **Some measures tend to be more visible than other measures.** For example, tax rebates – such as those provided in Switzerland – tend to be more concrete and visible to individuals than general tax reductions, such as those implemented in British Columbia, or

those that impact them only indirectly, such as France's tax credits aimed at boosting employment. There might also be a trade-off between economic efficiency (labour tax reductions are very efficient) and maximizing the degree to which revenue recycling is actively perceived and, hence, useful in promoting (and defending) the policy.

- **Governments need to be aware of timing and the role of external factors in shaping how the policy is perceived.** It is important to note that the general economic and political context of a country may also outweigh any design features or positive communications campaigns. The timing of the policy is therefore crucial. In France for instance, a spike in oil prices and increases in other taxes (on tobacco, social service contributions in parallel to the abolishment of wealth tax) that coincided with carbon tax increases also increased the negative perception of the carbon tax's impacts.
- **If the fairness narrative is used, the policy needs to consistently tackle emissions by industry and consumers.** Placing too high a burden on consumers vis-à-vis industry can undermine the argument that the policy makes polluters pay. For example, in France, critics raised the issue that big companies are taxed at a lower rate than ordinary citizens due to several exemptions in place. Directing revenue toward social spending may help to address these concerns.

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